

ABSTRACT OF THE DISCLOSURE

A material such as imidazole (nitrogen-containing heterocyclic compound), which has at least one lone pair, is dispersed in a basic solid polymer such as polybenzimidazole. The mole number of imidazole per gram of polybenzimidazole is less than 0.0014 mol, preferably less than 0.0006 mol. The basic solid polymer is impregnated with an acidic inorganic liquid such as phosphoric acid and sulfuric acid to prepare a proton conductive solid polymer electrolyte.